Author Index

Abbot, J.
Cracking reactions of C_6 paraffins on HZSM-5 105

Bellotto, M., see Cristiani, C. 253
Bianchi, D., see Levesque, P. 31
Buffat, P.-A., see Prairie, M.R. 83
Burggraaf, A.J., see Mercera, P.D.L. 127

Cant, N.W., see Lee, J.C. 215
Centi, G., see Grasselli, R.K. 149
Chuang, S.S.C.
–, Pien, S.-I. and Narayanan, R.
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241
Cooper, M.E.
– and Frost, J.
New iron/nickel alloy catalyst for Fischer–Tropsch synthesis L5
Cristiani, C.
–, Bellotto, M., Forzatti, P. and Tronconi, E.
Synthesis of alcohols from carbon oxides and hydrogen. XVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253
Cuevas, R., see Ramirez, J. 223

Da Silva, P.N., see Frety, R. 99
Doesburg, E.B.M., see Mercera, P.D.L. 127

Espinos, J.P., see Fernández, A. 191

Fahlke, B., see Martin, A. 203
Fernández, A.
–, Munuera, G., González-Elipe, A.R., Espinós, J.P., Herrmann, J.-M., Pichat, P. and Leclercq, C.
Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts 191
Fierro, J.L.G., see Ramirez, J. 223
Forzatti, P., see Cristiani, C. 253
Frety, R.
–, Da Silva, P.N. and Guenin, M.
Supported iridium catalysts. Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Frost, J., see Cooper, M.E. L5
Fung, D.P.C., see Hunter, N.R. 45

Gesser, H.D., see Hunter, N.R. 45
Gonzalez-Elipe, A.R., see Fernández, A. 191
Grasselli, R.K.
–, Centi, G. and Trifiro', F.
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts – a review 149
Guenin, M., see Frety, R. 99

Herrmann, J.-M., see Fernández, A. 191
Huang, K., see Shen, Y. 55
Hunter, N.R.
–, Gesser, H.D., Morton, L.A., Yarlagadda, P.S. and Fung, D.P.C.
Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane 45

Jerschkewitz, H.-G., see Kürschner, U. 167

Kim, J.C., see Lee, J.S. 1
Kim, Y.G., see Lee, J.S. 1
Kumar, R., see Thangaraj, A L1
Kürschner, U.
–, Jerschkewitz, H.-G., Schreier, E. and Völter, J.
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization 167

Le Van Mao, R., see Levesque, P. 31
Leclercq, C., see Fernández, A. 191
Lee, J.C.
–, Cant, N.W., Trimm, D.L. and Wainwright, M.S.
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects 215
Lee, J.S.
–, Kim, J.C. and Kim, Y.G.
Methyl formate as a new building block in C_1 chemistry – a review 1
Levesque, P.
–, Bianchi, D., Le Van Mao, R. and Pajonk, G.M.

Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts 31
López Agudo, A., see Ramirez, J. 223
Lücke, B., see Martin, A. 203

Mallát, T.
–, and Petró, J.
Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium–carbon catalyst; the mechanism of metal ion poisoning 71
Martin, A.
–, Nowak, S., Lücke, B., Wieker, W. and Fahlke, B.
Coupled conversion of methanol and C_4-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites 203
Mendioroz, S., see Ramirez, J. 223
Mercera, P.D.L.
–, Van Ommen, J.G., Doesburg, E.B.M., Burggraaf, A.J. and Ross, J.R.H.
Zirconia as a support for catalysts: Evolution of the texture and structure on calcination in air 127
Morton, L.A., see Hunter, N.R. 45
Munuera, G., see Fernández, A. 191

Narayanan, R., see Chuang, S.S.C. 241
Nowak, S., see Martin, A. 203

Pajonk, G.M., see Levesque, P. 31
Petró, J., see Mallát, T. 71
Pichat, P., see Fernández, A. 191
Pien, S.-I., see Chuang, S.S.C. 241
Prairie, M.R.
–, Su, S., Renken, A., Ruterana, P. and Buffat, P.-A.
Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst 83
Ramirez, J.
–, Cuevas, R., López Agudo, A., Mendioroz, S. and Fierro, J.L.G.
Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)–Mo/Al_2O_3 catalysts 223
Ratnasamy, P., see Thangaraj, A. 1
Reichmann, M.G.
Cracking of C_9 paraffins over xylene isomerization catalysts 179
Renken, A., see Prairie, M.R. 83
Ross, J.R.H., see Mercera, P.D.L. 127
Ruterana, P., see Prairie, M.R. 83

Schreier, E., see Kürschner, U. 167
Shen, Y.
–, Wang, S. and Huang, K.
Effects of chloride precursors on the palladium valency and surface structures of Pd–Mg^{2+}/SiO_2 catalysts for carbon monoxide hydrogenation 55
Su, S., see Prairie, M.R. 83

Thangaraj, A.
–, Kumar, R. and Ratnasamy, P.
Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium–silicate zeolites L1
Trifiro', F., see Grasselli, R.K. 149
Trimm, D.L., see Lee, J.C. 215
Tronconi, E., see Cristiani, C. 253

Völter, J., see Kürschner, U. 167
Van Ommen, J.G., see Mercera, P.D.L. 127

Wainwright, M.S., see Lee, J.C. 215
Wang, S., see Shen, Y. 55
Wieker, W., see Martin, A. 203

Yarlagadda, P.S., see Hunter, N.R. 45

Subject Index

Acetic acid
Methyl formate as a new building block in C_1 chemistry – a review 1

Acid sites
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization 167

Acid sites
Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts 31

Acrylonitrile hydrolysis
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects 215

Adsorption
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects 215

Adsorption
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241

Ageing
Cracking reactions of C_6 paraffins on HZSM-5 105

Ageing
Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane 45

Ageing
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts – a review 149

Ageing
Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst 83

Ageing
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects 215

Alcohol synthesis
Synthesis of alcohols from carbon oxides and hydrogen. HVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253

Alkane cracking
Cracking of C_9 paraffins over xylene isomerization catalysts 179

Ammoxidation
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts – a review 149

Benzene hydroxylation
Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium–silicate zeolites L1

Bimetallic catalysts
Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts 191

Brønsted sites
Cracking reactions of C_6 paraffins on HZSM-5 105

Carbon monoxide hydrogenation
Effects of chloride precursors on the palladium valency and surface structures of $Pd–Mg^{2+}/SiO_2$ catalysts for carbon monoxide hydrogenation 55

Carbon monoxide hydrogenation
Synthesis of alcohols from carbon oxides and hydrogen. HVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253

Carbon monoxide hydrogenation
New iron/nickel alloy catalyst for Fischer–Tropsch synthesis L5

Catalyst characterization (STEM, TEM, XPS)
Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts 191

Catalyst characterization (TPD)
Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts 31

Catalyst characterization (DTA-TG, IR, UV-vis, SEM, XPS, XRD)
Synthesis of alcohols from carbon oxides and hydrogen. HVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253

Catalyst characterization (TG/DTG, DSC, XRD, nitrogen adsorption)
Zirconia as a support for catalysts: Evolution of the texture and structure on calcination in air 127
Catalyst characterization (ESR, XPS)
Effects of chloride precursors on the palladium valency and surface structures of Pd–Mg^{2+}/SiO_2 catalysts for carbon monoxide hydrogenation 55
Catalyst characterization (IR, XPS, XRD)
Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)–Mo/Al_2O_3 catalysts 223
Catalyst characterization (EPR, TPDA, XRD)
Coupled conversion of methanol and C_4-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites 203
Catalyst preparation (precipitation)
Synthesis of alcohols from carbon oxides and hydrogen. HVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253
Catalyst preparation (hydrolysis/precipitation)
Zirconia as a support for catalysts: Evolution of the texture and structure on calcination in air 127
Catalyst preparation (zeolite synthesis)
Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts 31
Catalyst preparation (photocatalytic deposition)
Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts 191
Cobalt–molybdenum/alumina
Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)–Mo/Al_2O_3 catalysts 223
Coke formation
Coupled conversion of methanol and C_4-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites 203
Coke formation
Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst 83
Copper
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects 215
Cracking
Cracking of C_9 paraffins over xylene isomerization catalysts 179
Cyclohexane dehydrogenation
Supported iridium catalysts: Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Cyclohexane isomerization
Cracking reactions of C_6 paraffins on HZSM-5 105
Cyclohexene hydrogenation
Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)–Mo/Al_2O_3 catalysts 223

Dehydrogenation
Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst 83

Fischer–Tropsch synthesis
New iron/nickel alloy catalyst for Fischer–Tropsch synthesis L5
Fluorine
Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)–Mo/Al_2O_3 catalysts 223

Glycol
Methyl formate as a new building block in C_1 chemistry – a review 1

Hydrodehalogenation
Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium–carbon catalyst; the mechanism of metal ion poisoning 71
Hydrodesulphurization
Supported iridium catalysts: Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Hydrogen peroxide
Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium–silicate zeolites L1

Hydroxylation
Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium–silicate zeolites L1

Iridium/alumina
Supported iridium catalysts: Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Iridium/magnesia
Supported iridium catalysts: Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Iridium/silica–alumina
Supported iridium catalysts: Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Iron/nickel
New iron/nickel alloy catalyst for Fischer–Tropsch synthesis L5
Isomerization
Cracking of C_9 paraffins over xylene isomerization catalysts 179

Kinetics
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects 215
Kinetics
Cracking reactions of C_6 paraffins on HZSM-5 105
Kinetics
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241

Magnesium–chromium
Synthesis of alcohols from carbon oxides and hydrogen. HVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253
Metal ion poisoning
Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium–carbon catalyst; the mechanism of metal ion poisoning 71
Methane oxidation
Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane 45
Methanol
Methyl formate as a new building block in C_1 chemistry – a review 1
Methanol conversion
Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts 31
Methanol dehydrogenation
Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst 83
Methanol synthesis
Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane 45
Methanol–hydrocarbon cracking
Coupled conversion of methanol and C_4-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites 203
Methyl formate
Methyl formate as a new building block in C_1 chemistry – a review 1

Nickel–molybdenum/alumina
Effect of fluorine on hydrogenation of cyclohexene on sulfided Ni (or Co)–Mo/Al_2O_3 catalysts 223

Oxygenate synthesis
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241

Palladium–carbon
Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium–carbon catalyst; the mechanism of metal ion poisoning 71
Palladium–magnesium/silica
Effects of chloride precursors on the palladium valency and surface structures of Pd–Mg^{2+}/SiO_2 catalysts for carbon monoxide hydrogenation 55
Photonic activation
Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts 191
Platinum/titania
Photoassisted deposition of rhodium on platinum/titania samples as a method of preparing bimetallic catalysts 191

Regeneration
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts – a review 149
Rhodium–silver/silica
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241

Selectivity (*p*-xylene)
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization 167
Selectivity (acrylonitrile)
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts – a review 149
Selectivity (alcohols)
Synthesis of alcohols from carbon oxides and hydrogen. HVIII. Preparation chemistry, phase transformations and catalytic behaviour of unpromoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253
Selectivity (benzene)
Supported iridium catalysts: Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Selectivity (C_2 oxygenates)
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241
Carbon monoxide hydrogenation
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241
Selectivity (light alkenes)
Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts 31
Selectivity (lower alkenes)
Coupled conversion of methanol and C_4-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites 203
Selectivity (methanol)
Methanol formation at high pressure by the catalyzed oxidation of natural gas and by the sensitized oxidation of methane 45
Selectivity (methanol)
Effects of chloride precursors on the palladium valency and surface structures of Pd–Mg^{2+}/SiO_2 catalysts for carbon monoxide hydrogenation 55
Selectivity (phenol)
Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium–silicate zeolites L1
Selectivity (shape-)
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization 167
Selectivity (unsaturated bicyclic ketones)
Selective hydrodehalogenation of an olefinic compound on doubly poisoned palladium–carbon catalyst; the mechanism of metal ion poisoning 71
Sintering
Zirconia as a support for catalysts: Evolution of the texture and structure on calcination in air 127
Sodium carbonate
Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst 83
Sodium molybdate
Chemical and structural changes of Na_2MoO_4 as a methanol dehydrogenation catalyst 83
Solvent effects
Copper catalysed hydrolysis of acrylonitrile to acrylamide: solvent effects 215
Sulphur poisoning
Supported iridium catalysts: Comparison between resistance to sulphur poisoning and hydrodesulphurization properties 99
Syngas conversion
C_2 oxygenate synthesis from CO hydrogenation on $AgRh/SiO_2$ 241
Syngas conversion
Methyl formate as a new building block in C_1 chemistry – a review 1
Syngas conversion
Effects of chloride precursors on the palladium valency and surface structures of Pd–Mg^{2+}/SiO_2 catalysts for carbon monoxide hydrogenation 55
Syngas conversion
New iron/nickel alloy catalyst for Fischer–Tropsch synthesis L5
Syngas conversion
Synthesis of alcohols from carbon oxides and hydrogen. HVIII. Preparation chemistry, phase transformations and catalytic behaviour of un-

promoted Mn–Cr–O systems in the synthesis of alcohols from carbon monoxide and hydrogen 253

Tellurium
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts – a review 149

Titanium–silicate zeolites
Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium–silicate zeolites L1

Toluene disproportionation
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization 167

Volatility
Selective oxidation of hydrocarbons employing tellurium containing heterogeneous catalysts – a review 149

Xylene isomerization
Cracking of C_9 paraffins over xylene isomerization catalysts 179

Xylene isomerization
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization 167

Zeolites
Direct catalytic hydroxylation of benzene with hydrogen peroxide over titanium–silicate zeolites L1

Zeolites
Effect of magnesium in the conversion of methanol on chryso-zeolite or zeolite ZSM-5 catalysts 31

Zeolites
Cracking reactions of C_6 paraffins on HZSM-5 105

Zeolites
Shape selectivity of hydrothermally treated H-ZSM-5 in toluene disproportionation and xylene isomerization 167

Zeolites
Coupled conversion of methanol and C_4-hydrocarbons (CMHC) on iron-containing ZSM-5 type zeolites 203

Zirconia
Zirconia as a support for catalysts: Evolution of the texture and structure on calcination in air 127